



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/634,762	08/06/2003	Masahiko Kataoka	Q76826	6867

23373 7590 02/19/2004
SUGHRUE MION, PLLC
2100 PENNSYLVANIA AVENUE, N.W.
SUITE 800
WASHINGTON, DC 20037

EXAMINER

CHANG, CHING

ART UNIT PAPER NUMBER

3748

DATE MAILED: 02/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/634,762

Applicant(s)

KATAOKA ET AL.

Examiner

Ching Chang

Art Unit

3748

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. ***Claims 1, 2, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hara (US Patent No. 5,682,847) in view of Bloomfield (US Patent No. 2,439,415), Sieglar (US Patent No. 4,249,488), and Sheldon (US Patent No. 5,960,617).***

Hara discloses a rocker arm (4, 5) capable of being rockingly driven by a cam (12, 13) for selectively opening and closing a valve (1) mounted on a cylinder head of an internal combustion engine, which rocker arm comprises: an arm body having first and second ends opposite to each other (See Fig. 1), the first end of the arm body having an internally threaded hole (4A, 5A) designed therein; an adjustment screw (7) which serves as a pivot member or a valve drive member, the adjustment screw being threaded into the internally threaded hole in the first end of the arm body with one end portion of the adjustment screw protruding outwardly from the first end of the rocker arm; wherein the adjustment screw has one end provided with a valve drive piece and wherein the arm body is

Art Unit: 3748

supported at a generally intermediate portion thereof for rocking motion and a roller (10A, 10B) engageable with the cam is fitted to the second end of the arm body.

Hara discloses the invention, however, fails to disclose the adjustment screw being fixed relative to the arm body by means of a structure selected from the group consisting of a first structure in which two nuts are threaded onto such one end portion of the adjustment screw in overlapping relation with each other, a second structure in which a flanged nut is threaded onto such one end portion of the adjustment screw, and a third structure in which a nut is threaded onto such one end portion of the adjustment screw with a washer intervening between such nut and the first end of the arm body.

The patent to Bloomfield on the other hand, teaches that it is conventional in the lock nut art, to utilize a lock nut (22) to protect the nut (12) against loosening from the blot (10).

The patent to Sheldon on the other hand, teaches that it is conventional in the fastener art, to utilize a flanged nut (71) to secure a blade to a blot (70).

The patent to Siegla on the other hand, teaches that it is conventional in the valve lift adjusting device art, to utilize a nut (84) and a washer (83) to secure a bracket arm to a stud (81).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized the lock nut, the flanged nut, and the nut with a washer as taught by Bloomfield, Sheldon, and Siegla, respectively,

Art Unit: 3748

in the Hara device, since the use thereof would provide an improved valve actuating device.

3. ***Claims 3, 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hara in view of Bloomfield, Siegla, and Sheldon (as applied to claim 1), and further in view of Okubo et al. (US Patent No. 6,601,555).***

The modified Hara, however, fails to disclose the arm body being made of sheet metal.

The patent to Okubo on the other hand, teaches that it is conventional in the sheet metal rocker arm art, to manufacture a sheet metal rocker arm (31), wherein the arm body is prepared from a single plate metal by means of a press work to represent a generally inverted U-sectioned configuration including a pair of opposite side wall (22), and a connecting wall (24) bridging between the opposite side walls; and a roller (through 18) engageable with the cam is fitted to a portion generally intermediate of the arm body.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized the sheet metal rocker arm as taught by Okubo in the modified Hara device, since the use thereof would provide a light weight and cost effective valve actuating device.

4. ***Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hara in view of Bloomfield, Siegla, and Sheldon, and further in view of***

Art Unit: 3748

Okubo (as applied to claim 3/1), and further in view of Nagano et al. (US Patent No. 5,678,305).

The modified Hara device, however, fails to disclose the threaded hole being defined in a first end portion of the connecting wall of the arm body.

The patent to Nagano on the other hand, teaches that it is conventional in the sheet metal rocker arm art, to manufacture a sheet metal rocker arm (6), with a threaded hole (24) being defined in a first end portion of the connecting wall (14, 14a) of the arm body.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized the sheet metal rocker arm with a threaded hole in its first end portion of the connecting wall as taught by Nagano in the modified Hara device, since the use thereof would provide an improved valve actuating device.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ching Chang whose telephone number is

Art Unit: 3748


(703)306-3478. The examiner can normally be reached on M-Th, 7:00 AM -5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Denion can be reached on (703)308-2623. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patent Examiner


Ching Chang


THOMAS DENION
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700